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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HARRINGTON & SMITH, PC			MILLER, BRANDON J	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/559,919	DERRYBERRY ET AL.
	Examiner	Art Unit
	Brandon J. Miller	2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 June 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-34 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 23-30 is/are allowed.
 6) Claim(s) 1-22 and 31-34 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 07 December 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. _____.
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____. 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Response to Amendment

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/11/2007 has been entered.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Claim 23 recites a method for operating a mobile station (MS) with a base station (BS) for transmitting data packets from the mobile station to the base station over a reverse supplemental channel (R-SCH) with a structure as defined in the specification (pages 4-13) including at least four reverse supplemental channel (R-SCH) states and at least eight transitions between the R-SCH states, where the at least four R-SCH states comprise a R-SCH initialization state, a R-SCH autonomous state, a R-SCH scheduled state, and a R-SCH release state. Applicant's independent claim 23 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 24-30 are allowable based upon their dependence of independent claim 23.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 10, 12, 19, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Whinnett et al. (US 2004/0219919 A1).

Regarding claim 1 Whinnett teaches a method for operating a mobile station with a base station, comprising when the mobile station is in an autonomous mode of operation, autonomously transmitting data from the mobile station to the base station on a reverse channel (see paragraphs [0053], [0056] & [0058]). Whinnett teaches in response to receiving an acknowledgment indication from the base station, that comprises a reverse channel assignment message for the mobile station, switching the mobile station to a scheduled mode of operation (see paragraphs [0060] – [0061]). Whinnett teaches while in the scheduled mode, the mobile station provides the data transmission power and the selected data transmission buffer status as a request; and transmitting data from the mobile station on an assigned reverse channel (see paragraphs [0044] & [0063]).

Regarding claim 3 Whinnett teaches where the reverse channel comprises one of a reverse enhanced access channel, a reverse fundamental channel, and a reverse dedicated channel (see paragraph [0046]).

Regarding claim 10 Whinnett teaches a mobile station, comprising: an RF transceiver for conducting bidirectional wireless communications with a base station; and a data processor operating under control of a stored program (see paragraphs [0002] & [0028] – [0029]). Whinnett teaches when the mobile station is in an autonomous mode of operation, autonomously transmitting from the mobile station to the base station on a reverse channel (see paragraphs [0053], [0056] & [0058]). Whinnett teaches receiving an acknowledgment indication from the bases station, that comprises a reverse channel assignment message for the mobile station, for switching the mobile station to a scheduled mode of operation and for transmitting data from the mobile station on an assigned reverse channel (see paragraphs [0060] – [0061]). Whinnett teaches while in the scheduled mode, the mobile station provides the data transmission power and the selected data transmission buffer status as a request (see paragraphs [0044] & [0063]).

Regarding claim 12 Whinnett teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 19 Whinnett teaches where the mobile station and the base station communicate over a reverse synchronous code division, multiple access channel (see paragraphs [[0041] & [0058]]).

Regarding claim 34 Whinnett teaches a mobile station, comprising a transceiver for receiving and transmitting signals; and a signal processor coupled to the transceiver; a controller coupled to the signal processor and providing information to the signal processor to be converted fro transmission through the transceiver (see paragraphs [0002] & [0028] – [0029]). Whinnett teaches wherein, in the autonomous mode, the mobile station is configured to select a data transmission rate for transmission to the base station (see paragraphs [0053], selecting whether to

continue transmitting in autonomous mode or switch to scheduled mode relates to select a data transmission rate for transmission to the base station). Whinnett teaches wherein, in the scheduled mode, the mobile station is configured to transmit a request by providing the data transmission power and the selected data transmission buffer status to the base station for granting a data transmission rate to the mobile station (see paragraphs [0044] & [0063]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4-9, 11, 13-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whinnett et al. (US 2004/0219919 A1) in view of Kadaba et al. (US 2002/0172217 A1).

Regarding claim 2 Whinnett teaches a device as recited in claim 1 except for transmitting from the mobile station to the base station to initiate the data transmission comprises transmitting a supplemental channel request message. Whinnett does teach transmitting from the mobile station to the base station to initiate the data transmission comprises transmitting a request message (see paragraph [0056]). Kadaba teaches a reverse supplemental channel (see paragraph [0024]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include a supplemental channel a because both references teach methods for transitioning a mobile station between autonomous and

scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

Regarding claim 4 Whinnett and Kadaba teach a device as recited in claim 2 except for where the acknowledgment indication comprises a supplemental channel assignment message. Whinnett does teach an assignment message (see paragraph [0060]). Kadaba does teach a reverse supplemental channel (see paragraph [0024]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include where the acknowledgment indication comprises a supplemental channel assignment message because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

Regarding claim 5 Kadaba teaches where the acknowledge indication comprises power control bits and data rate grant bits (see paragraph [0036], rate/power up or rate/power down relates to power control bits and data rate grant bits).

Regarding claim 6 Kadaba teaches where the power control bits and data rate grant bits are received by the mobile station on a common power control channel (see paragraph [0036], rate/power up or rate/power down relates to power control bits and data rate grant bits).

Regarding claim 7 Kadaba teaches a device as recited in claim 1 except for where transmitting the data from the mobile station on the assigned reverse channel comprises also transmitting mobile station buffer activity bits and a data rate request bit, and further comprising

receiving, from the base station, a power control bit, a data rate grant bit and an acknowledgment/non-acknowledgment indication. Whinnett does teach receiving from the base station an acknowledgment/non-acknowledgment indication (see paragraphs [0060] – [0061]). Whinnett does teach wherein transmitting data packets from the mobile station on an assigned reverse channel, further comprises transmitting mobile station buffer activity and data rate request (see paragraphs [0044], [0053] & [0056], request for scheduled mode relates to data rate request). Kadaba teaches receiving from the base station power control bits and data rate grant bits and an acknowledgment/non-acknowledgment indication (see paragraph [0036], rate/power up or rate/power down relates to power control bits and data rate grant bits). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include where transmitting the data from the mobile station on the assigned reverse channel comprises also transmitting mobile station buffer activity bits and a data rate request bit, and further comprising receiving, from the base station, a power control bit, a data rate grant bit and an acknowledgment/non-acknowledgment indication because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

Regarding claim 8 Whinnett teaches where the data rate request is transmitted as part of a dynamic buffer status report, and request one of an increase in data rate, a decrease in data rate, or no change in the data rate (see paragraphs [0044], [0053] & [0056], request for scheduled

mode relates to data rate request and would result in one of an increase in data rate, a decrease in data rate, or no change in the data rate).

Regarding claim 9 Whinnett and Kadaba teach a device as recited in claim 8 except for where the data rate grant bit is time multiplexed by the base station with the power control bit, and indicates one of a grant of the requested data rate or denial of the requested data rate. Kadaba does teach where the data rate grant bit is mixed with the power control bit, and indicates one of a grant of the requested data rate or denial of the requested data rate (see paragraph [0036]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include where the data rate grant bit is time multiplexed by the base station with the power control bit, and indicates one of a grant of the requested data rate or denial of the requested data rate because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

Regarding claim 11 Whinnett and Kadaba teach a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 13 Whinnett and Kadaba teach a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 14 Whinnett and Kadaba teach a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 15 Whinnett and Kadaba teach a device as recited in claim 6 and is rejected given the same reasoning as above.

Regarding claim 16 Whinnett and Kadaba teach a device as recited in claim 7 and is rejected given the same reasoning as above.

Regarding claim 17 Whinnett and Kadaba teach a device as recited in claim 8 and is rejected given the same reasoning as above.

Regarding claim 18 Whinnett and Kadaba teach a device as recited in claim 8 except for where the data rate grant bit is time demultiplexed by the base station with the power control bit, and indicates one of a grant of the requested data rate or denial of the requested data rate.

Kadaba does teach where the data rate grant bit is mixed with the power control bit, and indicates one of a grant of the requested data rate or denial of the requested data rate (see paragraph [0036]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include where the data rate grant bit is time demultiplexed by the base station with the power control bit, and indicates one of a grant of the requested data rate or denial of the requested data rate because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

Regarding claim 20 Whinnett teaches a method for operating a mobile station with a base station for transmitting data packets from the mobile station to the base station over a reverse channel (see paragraph [0042] & [0049]). Whinnett teaches when the mobile station is in an autonomous mode of operation, autonomously transmitting from the mobile station to the base station to initiate a data transmission from the mobile station to the base station (see paragraphs [0053] & [0056]). Whinnett teaches a request message that is transmitted over a reverse

enhanced access channel or a reverse supplemental channel (see paragraph [0058]). Whinnett teaches receiving an acknowledgment indication from the base station over a common power control channel, the acknowledgment indication comprising an assignment message and in response to receiving the acknowledgement indication from the base station, switching the mobile station to a scheduled mode of operation (see paragraphs [0060] – [0061]). Whinnett teaches wherein transmitting data packets from the mobile station on an assigned reverse channel, further comprises transmitting mobile station buffer activity and data rate request (see paragraphs [0044], [0053] & [0056], request for scheduled mode relates to data rate request). Whinnett teaches receiving from the base station an acknowledgment/non-acknowledgment indication (see paragraphs [0060] – [0061]). Whinnett does not specifically teach a supplemental channel and receiving from the base station power control bits and data rate grant bits. Kadaba teaches a reverse supplemental channel (see paragraph [0024]). Kadaba teaches receiving from the base station power control bits and data rate grant bits and an acknowledgment/non-acknowledgment indication (see paragraph [0036], rate/power up or rate/power down relates to power control bits and data rate grant bits). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include a supplemental channel and receiving from the base station power control bits and data rate grant bits because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

Regarding claim 21 Whinnett teaches a date rate request that is transmitted as part of a dynamic buffer status, QoS level and transmit power report, and requests one of an increase in data rate, a decrease in data rate, or no change in data rate (see paragraphs [0044], [0053] & [0056], request for scheduled mode relates to data rate request and would result in one of an increase in data rate, a decrease in data rate, or no change in the data rate).

Regarding claim 22 Whinnett and Kadaba teach a device as recited in claim 9 and is rejected given the same reasoning as above.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whinnett et al. (US 2004/0219919 A1) in view of Kadaba et al. (US 2002/0172217 A1) and Seo et al. (US 6,469,993 B1).

Regarding claim 31 Whinnett teaches a method for operating a mobile station with a base station, when the mobile station is in an autonomous mode of operation, autonomously transmitting data from the mobile station to the base station on a reverse channel (see paragraphs [0053], [0056] & [0058]). Whinnett teaches the mobile station receiving an assignment message from the base station, the assignment message comprising an acknowledgement/non-acknowledgment indication (see paragraphs [0060] – [0061]). Whinnett teaches in response to receiving an acknowledgment indication from the base station, switching the mobile station to a scheduled mode of operation (see paragraphs [0060] – [0061]). Whinnett does not specifically teach receiving from the base station power control bits, and data rate grant bits; and a reverse supplemental channel (R-SCH), wherein there exists at least four R-SCH states and a plurality of transitions between the R-SCH states. Kadaba teaches a reverse supplemental channel (see

paragraph [0024]). Kadaba teaches receiving from the base station power control bits and data rate grant bits and an acknowledgment/non-acknowledgment indication (see paragraph [0036], rate/power up or rate/power down relates to power control bits and data rate grant bits). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include a supplemental channel and receiving from the base station power control bits and data rate grant bits because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

It would have also been obvious to further modify the invention to include at least four R-SCH states and a plurality of transitions between the R-SCH states as taught in Seo (see Seo, col. 4, lines 47-51 & 65-67 and col. 5, lines 1-2, "OK", "NOT OK", suspension state and resumption state relates to at least four supplemental channel states) because the would have further improved transitions between autonomous mode and scheduled mode.

Regarding claim 32 Whinnett teaches a mobile station, comprising an RF transceiver for conducting bidirectional wireless communications with a base station; and a data processor operating under the control of a stored program (see paragraphs [0002] & [0028] – [0029]). Whinnett teaches autonomously transmitting data from the mobile station to the base station on a reverse channel (see paragraphs [0053], [0056] & [0058]). Whinnett teaches the mobile station receiving an assignment message from the base station, the assignment message comprising an acknowledgement/non-acknowledgment indication (see paragraphs [0060] – [0061]). Whinnett teaches in response to receiving an acknowledgment indication from the base station, switching

the mobile station to a scheduled mode of operation (see paragraphs [0060] – [0061]). Whinnett does not specifically teach receiving from the base station power control bits, and data rate grant bits; and a reverse supplemental channel (R-SCH), wherein there exists at least four R-SCH states and a plurality of transitions between the R-SCH states. Kadaba teaches a reverse supplemental channel (see paragraph [0024]). Kadaba teaches receiving from the base station power control bits and data rate grant bits and an acknowledgment/non-acknowledgment indication (see paragraph [0036], rate/power up or rate/power down relates to power control bits and data rate grant bits). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include a supplemental channel and receiving from the base station power control bits and data rate grant bits because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would allow for improved communication between the mobile station and base station when making such transitions.

It would have also been obvious to further modify the invention to include at least four R-SCH states and a plurality of transitions between the R-SCH states as taught in Seo (see Seo, col. 4, lines 47-51 & 65-67 and col. 5, lines 1-2, “OK”, “NOT OK”, suspension state and resumption state relates to at least four supplemental channel states) because the would have further improved transitions between autonomous mode and scheduled mode.

Regarding claim 33 Whinnett teaches a method for operating a mobile station with a base station for transmitting data packets from the mobile station to the base station over a reverse channel (see paragraph [0042] & [0049]). Whinnett teaches when the mobile station is in an

autonomous mode of operation, autonomously transmitting from the mobile station to the base station to initiate a data transmission from the mobile station to the base station (see paragraphs [0053] & [0056]). Whinnett teaches a request message that is transmitted over a reverse enhanced access channel or a reverse supplemental channel (see paragraph [0058]). Whinnett teaches receiving an acknowledgment indication from the base station and in response to receiving the acknowledgement indication from the base station, switching the mobile station to a scheduled mode of operation (see paragraphs [0060] – [0061]). Whinnett teaches wherein transmitting data packets from the mobile station, further comprise transmitting mobile station buffer activity and data rate request (see paragraphs [0044], [0053] & [0056], request for scheduled mode relates to data rate request). Whinnett teaches receiving from the base station an acknowledgment/non-acknowledgment indication (see paragraphs [0060] – [0061]). Whinnett does not specifically teach a supplemental channel and receiving from the base station power control bits and data rate grant bits and wherein there exists at least four R-SCH states and a plurality of transitions between the R-SCH states. Kadaba teaches a reverse supplemental channel (see paragraph [0024]). Kadaba teaches receiving from the base station power control bits and data rate grant bits and an acknowledgment/non-acknowledgment indication (see paragraph [0036], rate/power up or rate/power down relates to power control bits and data rate grant bits). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Whinnett adapt to include a supplemental channel and receiving from the base station power control bits and data rate grant bits because both references teach methods for transitioning a mobile station between autonomous and scheduled transmissions (see Whinnett, paragraph [0040] and Kadaba, [0051]) and the combination would

allow for improved communication between the mobile station and base station when making such transitions.

It would have also been obvious to further modify the invention to include at least four R-SCH states and a plurality of transitions between the R-SCH states as taught in Seo (see Seo, col. 4, lines 47-51 & 65-67 and col. 5, lines 1-2, "OK", "NOT OK", suspension state and resumption state relates to at least four supplemental channel states) because the would have further improved transitions between autonomous mode and scheduled mode.

Claim Objections

Claim 20 is objected to because of the following informalities: In line 5 there appears to be a typographical error. Appropriate correction is required.

Claim 23 is objected to because of the following informalities: In line 10 there appears to be a typographical error. Appropriate correction is required.

Response to Arguments

Applicant's arguments with respect to claims 1-22 and 31-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Derryberry et al. Pub. No.: US 2004/0240416 A1 discloses an apparatus and associated method by which to facilitate scheduling of data communications in a radio communications system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



July 2, 2007



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